REMARKS

Claims 1-12, 15-24, 26, 33, and 38-55 are pending in the present application. In the Office Action of October 18, 2004, Applicants received an election of species requirement, with Species 1 illustrated by Fig. 7 (claims 1-12, 15, 16, and 39-55) and Species II illustrated by Fig. 9 (claims 17-24, 26-33, and 38). Applicants hereby elect Species I, i.e. claims 1-12, 15, 16, and 39-55, for examination, and withdraw claims 17-24, 26-33, and 38, without traverse. Further, all remaining claims were rejected. Applicants hereby traverse the rejections as follows:

Rejections under 35 U.S.C. §102

Claims 1-3, 39-41, 54, and 55 were rejected under 35 U.S.C. §102(e) as being anticipated by Sahai et al. (hereinafter "Sahai", US 2004/0176099). It was alleged that Sahai teaches all of elements of these claims.

With regard to claims 1 and 55, it was alleged that Sahai teaches all of the claim elements, including "deriving an interpolation offset comprising a deviation between locations of the interpolated local maxima or minima and a sampled local maxima or minima" in paragraphs 0096-0098. Applicants believe that the cited paragraphs in Sahai do not teach this claim feature.

Paragraphs 0096 and 0097 describes a process of checking for the presence of peaks other than a main peak in the correlation function. Other peaks may be due to "cross-correlations induced by another strong satellite's signal correlating with this PRN code." It further discusses how to determine whether another peak is simply a discrepancy using "standard statistical tests", such as to compare the deviation from the expected mean with the expected standard deviation to see how many standard deviations away the observed results are. Paragraph 0098 discusses looking for "multipath phenomena". If multipath is detected, the code-phase search may be adjusted to be around an earlier peak or the confidence range for the code-phase estimate may be made larger.

The above-discussed sections from Sahai do not teach or suggest Applicants' feature of "deriving an *interpolation offset* comprising a deviation between locations of the interpolated local maxima or minima and a sampled local maxima or minima". There is simply nothing in the cited paragraphs, or anywhere else is Sahai, discussing an interpolation offset and how it is derived. Based on this alone, Applicants believe that the rejection under 102(e) should be withdrawn.

Claims 39 and 54 were likewise rejected as being taught by Sahai. Applicants reiterate the observations made above; that is, Sahai does not teach or suggest "deriving an interpolation offset comprising a deviation between locations of the interpolated local maxima or minima and a sampled local maxima or minima" in paragraphs 0096-0098, or anywhere else in Sahai. Applicants respectfully request that the rejection under 102(e) be withdrawn on this basis alone.

Regarding claims 2, 3, 40, and 41, Applicants believe that these claims are allowable as being dependent on allowable claims and therefore requests that the rejection under 102(e) be withdrawn.

Rejections under 35 U.S.C. 103

Claims 4-12 and 42-52 were rejected under 35 U.S.C. 103(a) as being unpatentable over Sahai et al. in view of US Patent No. 5,999,561 to Naden et al. (herein "Naden"). It was alleged that Sahai teaches all of the elements of these claims, except that Sahai does not teach that the interpolation offset is determined by using a pre-existing relationship that is present between these two variables. It was further alleged that Naden teaches this limitation in Figs. 28 and 29 and col. 42, lines 5-65), and that it would have been obvious to combine the references to arrive at Applicants' claims.

As noted earlier with respect to the rejections under 35 U.S.C. 102, above, Applicants do not believe that Sahai teaches "deriving an interpolation offset comprising a deviation between locations of the interpolated local maxima or minima and a sampled local maxima or minima". Applicants further believe that Naden also fails to teach this feature. Therefore, even if one were to combine the two references, the combination would still lack the aforementioned feature and, as such, these claims are believed to be allowable over Sahai in view of Naden.
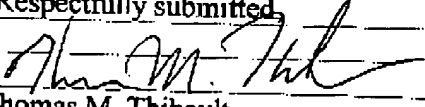
Claims 15, 16, and 53 were also rejected under 35 U.S.C. 103(a) as being unpatentable over Sahai et al. in view of US Patent Application No. 2004/0120387 to Bultan et al. (herein "Bultan"). It was alleged that Sahai teaches all of the elements of these claims, except that Sahai does not teach deriving an estimate of the parameter from the interpolation offset through an access to the lookup table. It was further alleged that Bultan teaches this limitation in paragraph 0043, and that it would have been obvious to combine the references to arrive at Applicants' claims.

Again, Applicants do not believe that Sahai teaches "deriving an interpolation offset comprising a deviation between locations of the interpolated local maxima or minima and a sampled local maxima or minima". Applicants further believe that Bultan

also fails to teach this feature. Therefore, even if one were to combine the two references, the combination would still lack the aforementioned feature and, as such, these claims are believed to be allowable over Sahai in view of Bultan.

CONCLUSION

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. It is believed that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Respectfully submitted,

Dated: March 18, 2005   By:

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